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NOT WITH IMPUNITY:

ASSESSING U.S. POLICY FOR RETALIATING TO A CHEMICAL OR BIOLOGICAL ATTACK

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Abstract

How should the United States determine its response to a chemical or biological attack against American personnel or interests? This paper assesses the current U.S. reprisal policy—known as "calculated ambiguity"—and concludes that today's policy does not contain enough substance to support strategy development. Current policy is designed to deter chemical and biological attacks by threatening an "overwhelming and devastating" response, with the strong implication that nuclear weapons may be employed in the U.S. response. The current policy is inadequate because it lacks credibility, it fails to address proportionality, and it focuses on state actors. To improve the policy's efficacy, two clarifications are needed: make regime survivability the hallmark of the policy, and determine under what conditions nuclear weapons would be considered. The paper concludes by presenting an analytical framework for determining the U.S. response should deterrence fail. In this framework, the key factors for assessing a U.S. response include: 1) the context in which the event occurred (i.e., war or peace); 2) adversary class; 3) number and type of casualties; and 4) ability to identify the perpetrator.

Biography

Lt Col Harry W. Conley is currently a student at the Air War College, Maxwell Air Force Base, Alabama. Following graduation, Lt Col Conley will be assigned as chief of the Systems Analysis Branch, Directorate of Requirements, Headquarters Air Combat Command, Langley AFB, Virginia. There he will be responsible for the conduct of studies and analyses for the Director of Requirements, and the Commander, Air Combat Command. His branch performs detailed assessments of current and projected weapon systems and munitions through the use of computer modeling and simulation. Prior to Air War College, Lt Col Conley was Deputy Program Manager in the Joint Simulation System (JSIMS) Joint Program Office. At JSIMS, he directed the development of DoD's largest-ever computer simulation, designed to support CINC and service battlestaff training. From 1993 to 1995, Lt Col Conley was the air analyst at Combined Forces Command, Seoul, Korea. He spent five years in the Pentagon assigned to the Air Force Studies and Analyses Agency where he conducted numerous studies for the Secretary and Chief of Staff of the Air Force. Lt Col Conley is a 1983 graduate of the U.S. Air Force Academy, where he received a B.S. in operations research. He holds a master's degree in operations research from Georgia Tech, and an MBA from the University of West Florida. Lt Col Conley is a distinguished graduate of the Air Command and Staff College and Squadron Officer School.

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Not With Impunity

Senator Jesse Helms: Suppose somebody used chemical weapons or poison gas on people in the United States…would they damn well regret it?

Secretary of Defense William Perry: Yes.

Helms: I want to know what the response will be if one of these rogue nations uses poison gas or chemical weaponry against either us or our allies…. What is the response of this country going to be?

Perry: Our response would be devastating.

Helms: Devastating—to them?

Perry: To them, yes…. And I believe they would know that it would be devastating to them.

Helms: Let the message go out.

Testimony of Secretary of Defense William Perry
Before the Senate Foreign Relations Committee
March 28, 1996.

How should the United States determine its response to a chemical or biological attack against American personnel or interests? The current U.S. retaliation policy, known as "calculated ambiguity," warns potential adversaries that they can expect an "overwhelming and devastating" response if chemical or biological weapons (CBW) are used against the U.S. or its allies.[1] Implied in this policy is a threat of U.S. nuclear retaliation, but the specifics of the U.S. response are left to the adversary's imagination. By not identifying a specific U.S. response to an attack, this intentionally vague policy is designed to maximize flexibility by giving the U.S. a virtually unlimited range of response options.[2] While ambiguity gives flexibility to policy makers, it also enhances deterrence by keeping adversaries guessing. There is, however, a downside to flexibility

and ambiguity. Because it is easier to prepare to execute a specific strategy than it is to prepare for a very broad range of possibilities, military preparedness suffers—at least at the strategic level—under a policy of ambiguity. It is not surprising, therefore, that the policy of calculated ambiguity, which intends to place doubt in the minds of potential adversaries, has at the same time engendered uncertainty among those who would have to implement the policy. This uncertainty could manifest itself in strategic unpreparedness. I argue in this paper that the U.S. needs a more clear reprisal policy, one which strikes a better balance between flexibility and preparedness.

In general, national policy should facilitate strategy development. If a policy fails to provide enough substance for making strategy, the policy ought to be revised. Adjectives such as "overwhelming" and "devastating" are the only guidelines the "calculated ambiguity" policy provides to strategy makers. Because the current policy aims to achieve unlimited flexibility through ambiguity, there is simply not enough substance in the policy to support strategy development. Absent a strategy, military means may not be able to support policy ends. In making the case that the current reprisal policy hampers strategic preparedness, I will first examine current policy and assess its strengths and weaknesses. Then I will suggest means for clarifying the policy, with a view toward better balancing flexibility and preparedness. Having proposed a policy which better supports strategy development, I will then present a strategic-analytic framework consisting of four critical variables which must be considered in formulating strategies for responding to a chemical or biological attack.

Examination and Assessment of the Current U.S. Reprisal Policy

What is the Current Policy?

Former President Clinton's National Security Strategy (NSS) calls weapons of mass destruction "the greatest potential threat to global stability and security."[3] The NSS further states, "Proliferation of advanced weapons and technologies threatens to provide rogue states, terrorists, and international crime organizations with the means to inflict terrible damage on the United States, our allies and U.S. citizens and troops abroad."[4] At his confirmation hearing in 1997, Secretary of Defense William Cohen said, "I believe the proliferation of weapons of mass destruction presents the greatest threat that the world has ever known."[5] Barry Schneider, director of the U.S. Air Force Counterproliferation Center, claims, "There are perhaps one hundred states that have the technical capability to manufacture and deploy biological weapons."[6] That Americans will be subject to a chemical or biological weapon attack is not a matter of "if," but "when."

In 1969, President Nixon cancelled all biological weapons programs in the U.S. More recently, the U.S. has begun to destroy its chemical weapons stockpile in accordance with the Chemical Weapons Convention.[7] The U.S. therefore no longer has the option of responding in kind to a chemical or biological attack. This situation has thrown U.S. retaliation policy into a conundrum: How best to respond to a weapons of mass destruction (WMD) attack when the only WMD in your arsenal is nuclear? Albert Mauroni, author of *America's Struggle with Chemical-Biological Warfare*, writes: "Our national policy of responding to enemy use of CB [chemical/biological] weapons has

shifted over the years from one extreme to the other; from retaliation using similar CB weapons to massive conventional retaliation to (most recently) nuclear retaliation."[8]

Prior to the Gulf War, President Bush and other officials let it be known that nuclear weapons might be used against Iraq, were Iraq to use its WMD against coalition forces.[9] However, in private, Bush reportedly ruled out the use of nuclear weapons.[10] During Desert Shield, former Secretary of State James Baker coined the term "calculated ambiguity" to describe this policy of secretly planning not to use nuclear weapons yet publicly threatening just the opposite.[11] Defense Secretary William Perry's testimony at hearings in 1996 on the Chemical Weapons Convention made it clear that ambiguity was still the policy for the Clinton administration. When asked what would be the U.S. response to a chemical attack, Perry replied, "We would not specify in advance what our response to a chemical attack is, except to say that it would be devastating."[12] When asked if the response could include nuclear weapons, Perry responded, "The whole range [of weapons] would be considered."[13] Perry's successor, William Cohen, reiterated the policy in 1998: "We think the ambiguity involved in the issue of nuclear weapons contributes to our own security, keeping any potential adversary who might use either chemical or biological [weapons] unsure of what our response would be."[14] It appears that the new Bush administration will advocate the same policy of ambiguity as its predecessors. Condoleeza Rice, newly-appointed National Security Advisor, threatens "national obliteration" to those who would use such weapons.[15] Robert Joseph, the new administration's senior advisor on counterproliferation issues, argues nuclear weapons should be an "essential component of the U.S. deterrent posture against [proliferation of mass destruction weapons]."[16]

Nuclear weapons have always been a lightning rod for controversy, so it should come as no surprise that an intense debate has been raging over the possible use of nuclear weapons in a U.S. reprisal against a CBW attack. At issue is the decades-long clash between so-called deterrence "hawks," who advocate a prime role for nuclear weapons in the calculus of deterrence, and the counterproliferation "doves," who maintain that the there are safer ways to deter the use of chemical and biological attacks, and that the U.S. should forswear first use of nuclear weapons. Deterrence theory, long relegated to the proverbial back burner, is witnessing a rebirth, driven in no small part by this U.S. reprisal policy, which, when taken at face value, clearly allows the U.S. to use nuclear weapons in response to something other than a nuclear attack. Deterrence hawks argue that the potential threat to U.S. interests from these attacks is so large, only by threatening absolute devastation with nuclear weapons can the U.S. deter such attacks.[17] The deterrence doves, on the other hand, place primacy on countering nuclear proliferation. The doves' position is that the U.S. goal of nuclear nonproliferation will be irreparably damaged if the U.S. continues to maintain a policy which allows nuclear first use. The U.S. should forswear nuclear retaliation, they argue, and instead should threaten a massive conventional response.[18]

To summarize, current U.S. reprisal policy is vague but threatening. It does not identify specific actions to be taken. Based on statements from the two previous defense secretaries, the current policy in no uncertain terms allows for a nuclear response by the U.S. The essence of U.S. reprisal policy is this: those using CBW against the U.S. or its allies can expect a devastating and overwhelming response.

Assessing the Current Policy

Is the current policy of calculated ambiguity viable? In assessing the current policy, one must answer two questions: What are the general criteria for evaluating a reprisal policy, and to what degree does the current U.S. policy satisfy these criteria?

Assessing the Current Policy: Criteria for Evaluating the Policy

To answer the first question, I submit that retaliatory policy should be measured against two key criteria. First, does the policy meet its stated objective? Second, does the policy support the development of strategy? The objective of the U.S.'s stated reprisal policy is clear: to deter the employment of chemical and biological weapons against U.S. interests. Colin Gray defines deterrence as "a condition wherein a deteree—the object of deterrent menaces—chooses not to behave in ways in which he would otherwise have chosen to behave, because he believes that the consequences would be intolerable."[19] Thus, there is no purpose in having a publicly stated reprisal policy if the U.S. does not believe this policy will cause the deteree to avoid undesirable behavior. Moreover, it is important that a reprisal policy deter not only state actors, but non-state actors as well. To be effective against states and non-state actors, the "deterrent menaces" of the policy must be applicable against each. Finally, the target audiences of the policy must perceive the threat as credible.

There are two essential objectives of deterrence in a reprisal policy. Perhaps the most important objective is deterrence of CBW first use. Deterring first use sometimes fails, which leads to the second objective: preventing recurrences or escalation of CBW attacks. Preventing recurrences can be accomplished via threats or direct military action. A primary mechanism for deterring or preventing escalation is punishment, the threat and

execution of which is intended to serve as a deterrent against further CBW attacks on the part of the adversary or other parties. For example, the swift bringing to justice of Timothy McVeigh could deter other terrorists who may be considering actions against the U.S. Thus, in evaluating a reprisal policy, it is important to determine the policy's applicability to state and non-state actors, its credibility, and the degree to which the stated policy addresses the two objectives of deterrence.

The second criterion in evaluating reprisal policy is the degree to which the policy supports strategy development. If a policy requires military action which cannot be well executed, the policy is flawed. Military forces may not be able to carry out a proposed action because the forces do not have the necessary means (e.g., equipment). Conversely, if there is no viable strategy, military forces may not be able to carry out an action even if they have the proper equipment. In this case, the forces are strategically unprepared.[20] So, to be effective, policy must enable the development of strategy. Gray defines strategy as "the bridge that relates military power to political purpose."[21] "Military strategy," according to Drew and Snow, is "the art and science of coordinating the development, deployment, and employment of military forces to achieve national security objectives."[22] Drawing from these definitions, if a policy (political purpose) is not clearly defined, the development of strategy is problematic. Thus, a viable policy must embody clear national security objectives for the development of strategy.

The 1998 cruise missile strikes against terrorist facilities in Afghanistan and Sudan provide an illustration of the thinking of the Clinton administration leadership relative to reprisal policy, and how this U.S. action was intended as both a punishment and a prevention of further attacks. In his address to the nation announcing the strikes, Clinton

stated a key reason for the U.S. response was "the imminent threat [the facilities] presented to our national security."[23] Thus, these strikes served several purposes: they sent a strong signal of U.S. willingness to retaliate; they served as a form of punishment against terrorist behavior; and they decreased the likelihood that those facilities could be used again.

Assessing the Current Policy: Shortcomings

Does the current policy of calculated ambiguity meet the stated objective of deterrence, and does it support the development of strategy? When measured against these two key criteria, today's policy has some significant shortcomings. One of the weaknesses of the policy is its credibility. Would a U.S. president really use nuclear weapons in retaliation for a CBW attack? It would seem that the threshold of damage would have to be very high for a president to consider using nuclear weapons, yet the stated policy does not address thresholds of damage. The main reason for the policy's lack of credibility is that it fails to address proportionality. Adjectives such as "overwhelming" and "devastating" in today's policy bring to mind a massive response. Yet one of the widely held tenets of the international law of armed conflict—the rule of proportionality—holds that armed action "must be measured and not excessive in the sense of being out of proportion to the original wrong nor disproportionate in achieving its redress."[24] Suppose an adversary killed several dozen American soldiers with a biological attack. Taken at face value, the current policy would seem to stipulate a response far out of proportion to the original attack. A disproportional response would surely trigger an international furor over U.S. actions. Moreover, it is not clear that threatening massive retaliation is the best deterrent against CBW use. Avigdor Haselkorn

writes in *The Continuing Storm*, "Frequently, the bigger and more indiscriminate the threat, the less believable it is in the eyes of the target audience."[25] Unfortunately, the current policy's wording may commit the U.S. to a massive response when in reality the situation does not call for an overwhelming retaliation.[26] In their statements, policymakers seem to imply all potential CBW events are equal, with each demanding the same massive response. In reality, of course, future CBW events will vary widely, and U.S. policy should be worded carefully to allow for a tailored response, appropriate to the situation.

A second shortcoming of the current policy is its implicit focus on state actors, when in fact the threat of CBW from non-state entities may be greater than the threat from states. It does not seem likely that Rice's phrase "national obliteration" would have much deterrent effect on terrorist groups. The current policy begs two questions: Does the threat of a nuclear response deter terrorists? Would the U.S. ever launch a nuclear weapon into a sovereign state in response to a terrorist attack? The answer to both questions is "very unlikely." Thus, while terrorists are a highly likely source of CBW attacks, the current policy all but ignores these non-state threats.

A third shortcoming of the current policy is that the policy is so ambiguous that it is of little use to strategy development and planning. Again, if policy is not clear, the development of strategy to support that policy is difficult, if not impossible. The U.S. reprisal policy of calculated ambiguity lends itself to flexibility for policymakers, but because the policy is so ambiguous, military planners are unable to develop strategies for linking the policy's ends to the means for accomplishing those ends. In other words, the doubt that the policy intends to place in the minds of potential adversaries translates into

uncertainty among those who would have to implement the policy. Two outcomes are possible as a result of this disconnection between policy ends and means. First, policymakers may feel compelled to consider the nuclear option because the military—lacking a coherent strategy—is unprepared at the strategic level to execute alternative actions. The other possible outcome resulting from the disconnection is that policymakers may feel they have no realistic options, and thus may opt to do nothing.

Assessing the Current Policy: Strengths

The calculated ambiguity policy does have one very strong feature. The more uncertain your adversary is about your response, the less likely he is to use chemical or biological weapons. As Paul Bernstein and Lewis Dunn write, "…deliberate ambiguity creates significant uncertainty for an adversary regarding the nature of our response to CBW use."[27] In other words, ambiguity deters, as long as the adversary perceives a U.S. willingness and ability to respond forcefully. Since the ambiguity in the current policy incorporates the possibility of a nuclear retaliation, one must ask, are today's chemical- and biological-capable adversaries deterred by the U.S. threat to retaliate with nuclear weapons? Even Scott Sagan, an articulate advocate of abandoning the role of nuclear weapons in U.S. reprisal policy, concedes that nuclear weapons contribute "the extra margin of deterrence" against CBW use.[28] The inherent deterrent value of nuclear weapons is a strength of the current policy, but policymakers must clarify the conditions under which nuclear weapons would be considered.

In summary, the current policy does appear to satisfy the first criterion of a reprisal policy: deterrence. However, as detailed earlier, deterrence is not the only important

criterion of a reprisal policy. The next section presents evidence that the current policy, because of its ambiguity, fails to support the development of strategy.

Assessing the Current Policy: Failure to Support Strategy Development

I have argued that the current U.S. reprisal policy has shortcomings which should be redressed, the most important of which is a lack of clarity. The policy is so ambiguous that it hampers the development of strategies which are necessary to implement the policy. There is ample evidence that the policy fails to support strategy development. Three key pieces of this evidence are presented in this section.

The first piece of evidence demonstrating that the current policy fails to support strategy development is the waffling of the Bush administration during the Gulf War. In the Gulf War, the United States faced a foe who was known to have used chemical weapons in the recent past, and was suspected of possessing biological weapons.[29] Bush and his top advisors struggled to answer the question, "What should the U.S. do if Iraq uses these weapons?"[30] In *Crusade*, Rick Atkinson describes the alternatives which were considered. These included a recommendation by General Norman Schwarzkopf to threaten nuclear weapons; air strikes against the presidential palace; a proposal to strike dams on the Tigris and Euphrates above Baghdad; a Brent Scowcroft suggestion to attack the oilfields; and a hint by Dick Cheney that Israel would retaliate with nuclear weapons if attacked with CBW.[31] There was no consensus on how to respond.[32] In the end, writes Haselkorn, "The ambiguity of the U.S. position on the proper response to Iraq's use of mass destruction weapons was as much a result of the conflicting stands within the Bush administration as it was part of a calculated policy."[33] The widely varying views taken by these individuals, each of whom held a position of influence, should be of great

concern. Had a retaliation been called for, uncertainty and lack of consensus among U.S. political and military leaders would have created difficulties in planning and executing a response.

The second piece of evidence that suggests the current policy is not pragmatic is the persistent stumbling over the issue by the Clinton administration. In *An Elusive Consensus*, Janne Nolan concludes that confusion over U.S. reprisal policy persisted throughout the Clinton administration.[34] The most visible issue the Clinton administration grappled with was the African Nuclear Weapons Free Zone (ANWFZ) Treaty, in which the U.S. promised not to use nuclear weapons in Africa. To assuage Pentagon concerns, the administration issued a declaration reserving the U.S. right to use nuclear weapons against states which employ weapons of mass destruction against U.S. interests. In another incident, a senior Pentagon official publicly argued for development of a new, earth-penetrating nuclear weapon which could be targeted against a Libyan chemical weapons plant. Pentagon spokesman Kenneth Bacon had to later issue a clarification, to "correct the impression … that the U.S. had accepted a policy of nuclear preemption against Libya," which would be in violation of the ANWFZ Treaty.[35]

This waffling and stumbling on the part of the last two administrations raises the question, is it possible to develop sound military strategy when policy is unclear? The answer appears to be "no." The third piece of evidence that the flawed reprisal policy has hampered strategy development is the disconnect between statements of grand strategy (including the National Security Strategy) and the Chairman of the Joint Chiefs of Staff's National Military Strategy (NMS). Recent grand strategy documents have strongly trumpeted the national security threat posed by chemical and biological weapons,

whereas the National Military Strategy barely gives a nod to the CBW threat. A perusal of these two documents highlights the disparity in focus between the grand strategy and the military strategy. Clinton's 1999 National Security Strategy makes numerous references to a counter-WMD strategy, including the previously cited statement that WMD presents "the greatest potential threat to global stability and security,"[36] as well as the following: "Because terrorist organizations may not be deterred by traditional means, we must ensure a robust capability to accurately attribute the source of attacks against the United States or its citizens, and to respond effectively and decisively to protect our national interests."[37] The NSS also specifically addresses the issue of reprisal: "The United States will act to deter or prevent such [WMD] attacks and, if attacks occur despite those efforts, will be prepared to defend against them, limit the damage they cause, and respond effectively against the perpetrators."[38] The predominant focus of the NMS, on the other hand, is the nation's two-MTW (major theater war) strategy, with relatively minor emphasis on WMD. The NMS concedes that the use of WMD by an adversary is "increasingly likely," and states U.S. forces must be able to detect, destroy, deter, protect forces from the effects of WMD, and restore affected areas.[39] But the NMS barely addresses the challenges of WMD use by non-state actors, and it does not discuss retaliation.

The evidence is clear: because of an overly-ambiguous policy of CBW reprisal, there is no strategy to link military capabilities with political objectives. Given the increasing likelihood over time that a CBW will be used against the United States, it is time now to begin redressing the broken link. The timeframe immediately following the first large-scale use of chemical or biological weapons against Americans is certain to be

fraught with extreme emotions. During a chemical or biological crisis, leaders will be inclined to make emotional judgements. As Terry Hawkins, Director of Nonproliferation and International Security at Los Alamos National Laboratories said, "If you don't have the preplanning, it will be almost impossible to deal with in the panic of the moment."[40] Two things need to change to rectify this situation. First, the policy must be clarified. Second, the strategy "bridge" linking ends and means must be developed. The next section of the paper will suggest ways to clarify and strengthen the policy, and the subsequent section will present a four-variable framework for strategy development.

Clarifying the Policy: Balancing Flexibility and Preparedness

There are two concrete steps that should be taken to clarify U.S. reprisal policy: 1) make regime survival and/or accountability the hallmark of the policy, and 2) determine under what conditions nuclear weapons would be used.

Rather than making vague threats such as "national obliteration," the primary feature of U.S. reprisal policy should be a guarantee to bring to justice those responsible for a chemical or biological attack. Responsible persons would include those leaders who directed the action, as well as their lieutenants who executed it. Making regime survival and accountability the hallmark of the reprisal policy has many benefits. First, it applies equally well to state as well as non-state actors, a distinct advantage over the current policy. Second, a promised retribution against the responsible parties does not have to be implemented immediately. Recent U.S. experiences with terrorism, including the joint Yemeni-FBI investigation into the U.S.S. Cole bombing (which netted six suspects and prompted others to flee to Afghanistan), the embassy bombings in Africa, and Pan Am Flight 103, demonstrate the effectiveness of the U.S. and international justice systems

when patience and diligence are applied to very challenging scenarios. Third, focusing the reprisal actions on those responsible for the CBW attack averts the potential criticism of a disproportionate U.S. response, which would be likely under the current policy. There is certainly solid precedent for threatening regime destruction. At his meeting with Iraqi Foreign Minister Tariq Aziz two weeks before Desert Storm, James Baker told Aziz, "If there is any use of weapons [of mass destruction], our objective won't just be the liberation of Kuwait, but the elimination of the current Iraqi regime, and anyone responsible for using those weapons would be held accountable."[41] Finally, direct threats against the decision makers responsible for the attacks—instead of promising "national obliteration"—would enhance the policy's credibility as a deterrent.[42]

The second major change to current U.S. reprisal policy should be to clarify when nuclear weapons would be used. In today's policy, when to use nuclear weapons is left as an open issue. Some argue this ambiguity enhances deterrence. The mushroom cloud is indeed one of the enduring images of the 20th century, and only the most ardent of the nonproliferators would argue the threat of nuclear weapons has no deterrent effect. Nuclear weapons may simply be too good of a deterrent to take off the table. Yet, because the current policy provides no guidance on the conditions under which nuclear weapons would be considered, planning and strategy—of both conventional and nuclear responses—have been severely hampered. When, and if, to use nuclear weapons in a reprisal is an enormously controversial issue. Bernstein and Dunn capture the issue well:

> There is no way to resolve fully these competing considerations related to what punishment to threaten. It would be dangerous to rule out the possibility of a nuclear response to CBW use, particularly in the face of egregious and highly damaging attacks. But it would be equally imprudent to rely exclusively on nuclear threats for deterrence of CBW use.[43]

Nuclear weapons should be considered only in the most horrifying and damaging attacks. Policy should reflect the reality that nuclear weapons will be used only in the most extreme circumstances. This will enable planners and strategists to "get on with" the business of planning and developing strategies for conventional responses, which will be the most likely kind of response directed by the president.

Robert Joseph asserts, "…for deterrence to work, the adversary must be convinced of our will and capability to respond decisively. On this score, ambiguity and uncertainty play very much against us."[44] My suggestions—to emphasize regime survival/accountability and clarify the role of nuclear weapons—would result in a less ambiguous policy. Given the situation today, in which U.S. planning and strategy have been paralyzed due to an unclear policy, it is time to make these clarifying changes to the policy. The benefit—a clear policy which supports strategy development—outweighs the drawbacks.

Policymakers and strategists need a framework to bound and focus the retaliation problem. The final section of the paper presents a strategic-analytic framework which can be useful to ensure logical thought processes prevail "in the panic of the moment."

Strategic Analytic Framework: Four Critical Variables

How should the U.S. determine its response to a CBW attack? Guided by political objectives inherent in a clearly articulated reprisal policy, the crisis response analysis can proceed by examining four key variables: context (i.e., wartime or peacetime), adversary class, number and type of casualties, and whether we can identify the perpetrators. These four variables form the genesis of an analytic framework which can enable policymakers and planners to begin developing reprisal strategies.

Context

The U.S. response to a "bolt-out-of-the-blue" CBW attack is likely to be far different than if U.S. forces were attacked during a conflict or period of hostilities. During hostilities, the mindset of U.S. leaders and the public is at a higher state of alert. If casualties in a conflict have already occurred from conventional means prior to a CBW attack, the leadership and the public may be somewhat inured and may not react as strongly they would in a peacetime scenario. Moreover, during hostilities, U.S. forces are likely to be utilizing CBW defense equipment, such as masks and detection equipment, which could serve to minimize the adverse impacts of a CBW attack. In fact, depending on the nature and scope of the attack, U.S. forces could "take it in stride", with little if any change in operational plans. In this case, a specific reprisal action may not be necessary.

The international legal standards for retaliation during peacetime are much higher. Richard Erickson, author of *Legitimate Use of Military Force Against State-Sponsored International Terrorism*, makes the point that reprisal has a "very low level of acceptability" in international law. He says, "The general view is that articles 2(3) and 2(4) of the UN Charter have outlawed peacetime reprisals….When states have relied upon it, the UN Security Council has condemned their action soundly."[45] Thus, reprisals in peacetime will have to pass a more strict set of criteria.

Adversary Class

The second variable to consider in reprisal calculations is adversary class. Is the perpetrator a state or non-state actor? Whereas international law gives clear guidance as to how states may legally respond to attacks from other states, the law is murky when

dealing with non-state actors; hence, any proposed U.S. retaliatory action must take this difference into account. For example, despite the evidence and strong justification for its actions against the Afghanistan and Sudan terrorist facilities, the U.S. was subject to much condemnation from the international community, not to mention internal criticism. U.S. reprisal attacks against non-state actors are likely to require much more evidence and justification compared to similar actions against state actors. There are many kinds of military actions which can be taken against a state actor, whereas the kinds of actions which can be taken against non-state actors may be limited. The nature of the reprisal, therefore, will be heavily influenced by the type of actor involved.

Number and Type of Casualties

The number of American casualties suffered due to a WMD attack may very well be the most important variable in determining the nature of the U.S. reprisal. A key question here is, how many Americans would have to be killed in order to prompt a massive response by the U.S? The bombing of U.S. Marines in Lebanon, the Oklahoma City bombing, and the downing of Pan Am Flight 103 each resulted in a casualty count of roughly the same order of magnitude (about 200-300 deaths.) Although these events caused anger and a desire for retaliation among the American public, there was no serious call for massive or nuclear retaliation. The body count from a single biological attack could easily be one or two orders of magnitude higher than these events. Using the rule of proportionality as a guide, it is debatable whether the U.S. would use massive force in responding to an event which resulted in only a few thousand deaths. However, what if the casualty count was around 300,000? Such an unimaginable result from a single CBW incident is not beyond the realm of possibility. "According to the U.S. Congress Office

of Technology Assessment, 100 kg of anthrax spores delivered by an efficient aerosol generator on a large urban target would be between two and six times as lethal as a one megaton thermo-nuclear bomb."[46] Would the deaths of 300,000 Americans be enough to trigger a nuclear response? In this case, proportionality does not rule out the use of nuclear weapons.

Besides just the total number of casualties, the type of the casualties—whether predominantly military versus civilian—will also impact the nature and scope of the U.S. reprisal action. Military combat entails known risks, and the emotions resulting from a significant number of military casualties are not likely to be as forceful as would be the case if the attack were against U.S. civilians.

World War II provides perhaps the best examples for the kind of event or circumstances which would have to take place to trigger a nuclear response. A CBW event producing a shock and death toll roughly equivalent to the attack on Pearl Harbor might be sufficient to prompt a nuclear retaliation. Truman's decision to drop the bombs on Hiroshima and Nagasaki—based on a calculation that up to one million casualties might be incurred in an invasion of the Japanese homeland[47]—is an example of the kind of thought process which would have to be conducted prior to a nuclear response to a CBW event. Utgoff suggests, "If nuclear retaliation is seen at the time to offer the best prospects for suppressing further CB attacks and speeding the defeat of the aggressor, and if the original attacks had caused severe damage that had outraged American or allied publics, nuclear retaliation would be more than just a possibility, whatever promises had been made."[48] Even the "overwhelming and devastating" conventional response threatened by Secretary Perry[49] would seem unlikely unless there were a very large

number of Americans or allies killed. In any event, it is imperative that policymakers and planners consider that the number and type of casualties, and the attendant public opinion resulting from those casualties, will play a significant role in determining the nature of U.S. reprisal actions.

Identification of the Perpetrator

Before taking military action against the parties responsible for a CBW attack, the U.S. is compelled to demonstrate that it has strong enough evidence linking the perpetrators to the act itself. How strong does the evidence have to be? Erickson writes: "The threshold for what constitutes sufficient evidence varies. Factors that must be considered are the threat, the response contemplated, and the audience to be persuaded."[50] Stronger evidence may result in the ability of the U.S. to conduct a stronger response. As a final consideration on the issue of evidence, policymakers must consider the possibility that there could be a large-scale attack with heavy U.S. or allied casualties, yet with insufficient evidence to allow for a reprisal.

In the final analysis, the U.S. response must be determined via a thorough cost/benefit calculation. Decision makers must ask, what are the potential results of a reprisal, both internationally and domestically? Are there any unanticipated consequences? Are there any vulnerabilities in the strategy? These are the kinds of tough questions which must be answered prior to determining a reprisal action. Today's policy, with its reliance on an "overwhelming response," is not useful in many potential situations. It has been, in the words of Bernstein and Dunn, "a false justification for inaction—for avoiding tough resource allocation decisions needed to improve our ability to defend against hostile CBW acts."[51]

Implications and Conclusion

The suggested policy clarifications and the strategic analytic framework proposed in this paper could serve to bound and focus policy debates and, if implemented, would enable strategists to begin to better link military capabilities with political objectives. Adapting the policy changes which I recommend has implications for at least two elements of U.S. military power: intelligence and special operations. If regime survival becomes the hallmark of U.S. reprisal policy, then the U.S. intelligence community must be challenged to improve intelligence collection against organizations suspected to be involved with chemical and biological weapons. To be successful in collecting this badly needed intelligence requires new ways of thinking about intelligence, improved cooperation among domestic and allied intelligence agencies, and increased budgets to reflect the national priority and concern for WMD. Being ready to retaliate following a CBW attack against the U.S. also implies an increased emphasis on special operations forces (SOF). In such situations, "SOF, because of their unique skills, regional expertise, cultural sensitivity and operational experience, may be the force of choice for meeting the strategic requirements of the National Command Authorities (NCA)…"[52] Finally, the U.S. must continue its investment in chemical and biological defense. If CBW defense equipment can mitigate the effects of a CBW attack, the adversary may see no advantage in using weapons of mass destruction.

Ultimately, the aim of U.S. CBW retaliation policy is deterrence. Although an element of ambiguity certainly can serve to enhance deterrence by keeping one's adversaries guessing about the response to an attack, it seems more likely that the U.S. is stuck with the current approach because there hasn't been much of the hard thinking

needed to devise a more robust policy. In other words, the current policy of calculated ambiguity—with its over-reliance on the nuclear "big stick"—is a "cop out." The U.S. is paying full price for today's half-policy. What is the result of today's flawed policy? Military forces may be strategically unprepared to respond when the time comes. To redress this situation, this paper demonstrated the shortfalls of the current policy, suggested ways to clarify the policy, and proposed a four-variable strategic-analytic framework of considerations for strategy development. These four variables could be used to shape and mold a new direction for U.S. CBW retaliation policy.

National Security Advisor Sandy Berger, in the days following the cruise missile strikes against Sudan and Afghanistan, said the U.S. strikes "…have made it clear that those who attack or target the United States cannot do so with impunity."[53] To back up this rhetoric with a credible deterrent threat requires the U.S. to have a robust, well-considered retaliation policy. Without a viable reprisal policy, the U.S is fated to fall victim to "the panic of the moment."

Notes

[1] Prepared Statement of William J. Perry, Hearing before the Committee on Foreign Relations, U.S. Senate, 104th Cong., 2d sess., March 28, 1996, cited in Scott Sagan, "The Commitment Trap," *International Security*, Vol. 24, No. 4, Spring 2000, 85.

[2] Because the "calculated ambiguity" policy seeks to maximize the options available to policy makers, it could also be called "absolute flexibility."

[3] William J. Clinton, *A National Security Strategy for a New Century*, (Washington, D.C.: The White House, December 1999), 6.

[4] Ibid.

[5] Testimony of Secretary Cohen, cited in *Proliferation: Threat and Response*, 1997, Office of the Secretary of Defense, n.p., on-line, Internet, 15 January 2001, available from DefenseLink at http://www.defenselink.mil/pubs/prolif97/index.html.

[6] Barry Schneider, *Future War and Counterproliferation: U.S. Military Responses to NBC Proliferation Threats*, (Westport, Connecticut: Praeger, 1999), 199.

Notes

[7] Albert J. Mauroni, *Chemical-Biological Defense*, (Westport, Connecticut: Praeger, 1999), 171. The Chemical Weapons Convention, effective 1997, "outlines a verifiable ban on all production, storage, and use of chemical weapons..."

[8] Albert J. Mauroni, *America's Struggle with Chemical-Biological Warfare*, (Westport, Connecticut: Praeger, 2000), 4.

[9] Stephen I. Schwartz, "Miscalculated Ambiguity: U.S. Policy on the Use and Threat of Use of Nuclear Weapons," *The Bulletin of the Atomic Scientist*, February 1998, n.p., on-line, Internet, 15 January 2001, available from http://www.nyu.edu/globalbeat/nuclear/schwartz0298.html.

[10] Ibid.

[11] Ibid.

[12] Senate Foreign Relations Committee, 104th Congress, 2nd Session, testimony of Secretary of Defense William Perry, 28 March, 1996.

[13] Ibid.

[14] Secretary of Defense William Cohen, cited in Scott Sagan, "The Commitment Trap," 85.

[15] Condoleeza Rice, "Promoting the National Interest," *Foreign Affairs*, Vol. 79, No. 1, January/February 2000, 61.

[16] Robert Joseph and Barry Bleachman, "Deterring Chemical and Biological Weapons," *Transforming Nuclear Deterrence*, Institute for National Strategic Studies, n.p., on-line, Internet, 15 January 2001, available from http://www.ndu.edu/ndu/inss/books/tnd/tnd2.html.

[17] Three recent publications which provide excellent discussions of the two sides of this heated debate are: 1) Victor A. Utgoff, "Nuclear Weapons and the Deterrence of Biological and Chemical Warfare," The Henry L. Stimson Center, Occasional Paper No. 36, October, 1997, 2) Sagan, "The Commitment Trap," and 3) "Responding to the Biological Weapons Challenge: Developing an Integrated Strategy," Chemical and Biological Arms Control Institute, Alexandria, VA, 2000.

[18] Ibid.

[19] Colin Gray, "*Deterrence in the 21st Century*," Comparative Strategy, Vol. 19, No. 3, July-September 2000, 256.

[20] The 1980 failed Iranian hostage rescue attempt is a good example of this second case. U.S. military forces had clear political objectives (rescue the hostages) and they had the equipment, but they lacked a viable strategy, joint doctrine, training, and interoperability. In other words, the U.S. was not "strategically prepared" for the Desert One operation.

[21] Colin Gray, *Modern Strategy*, (New York: Oxford University Press, 1999), 17.

[22] Dennis M. Drew and Donald M. Snow, *Making Strategy*, (Maxwell AFB, AL: Air University Press, 1988), 18.

[23] William J. Clinton, "The Fight Against Terrorism," President's Address to the Nation, August 20, 1998, *Vital Speeches of the Day*, Vol. LXIV, No. 23, 15 September 1998, p. 706-707.

Notes

[24] Richard J. Erickson, *Legitimate Use of Military Force Against State-Sponsored International Terrorism*, (Maxwell AFB, AL: Air University Press, 1989), 180.

[25] Avigdor Haselkorn, *The Continuing Storm*, (New Haven: Yale University Press, 1999), 49.

[26] Sagan advocates removing nuclear weapons from U.S. reprisal calculus because U.S. leadership may feel committed to responding to a CBW attack with nuclear weapons, based on strong policy declarations and promises to allies. Sagan calls this conundrum the "commitment trap."

[27] Paul I. Bernstein and Lewis A. Dunn, "Adapting Deterrence to the WMD Threat," in *Countering the Proliferation and Use of Weapons of Mass Destruction*, Peter L. hays, Vincent J. Jodoin, and Alan R. Van Tassel, eds. (New York: McGraw-Hill, 1998), 159.

[28] Sagan, 114.

[29] Mauroni, *Chemical-Biological Defense*, 26-27.

[30] Ibid., 28.

[31] Rick Atkinson, *Crusade*, (Boston: Houghton Mifflin, 1993), 86-87.

[32] McGeorge Bundy reported in a 1991 *Foreign Affairs* article that some of these differing opinions became public: "The president's associates … sometimes disagreed with each other. The most notable of these disagreements was that between some Pentagon officials and John Sununu, the White House chief of staff, who at one point found it prudent to give assurance that there was no likelihood of resort to tactical nuclear weapons. Nameless Pentagon sources then rebuked him for the military error of telling the enemy what we were not going to do. McGeorge Bundy, "Nuclear Weapons and the Gulf," *Foreign Affairs*, Fall, 1991, 86.

[33] Haselkorn, 60.

[34] Janne Nolan, *An Elusive Consensus*, (Washington, D.C.: Brookings Institution Press, 1999), 81.

[35] Ibid.

[36] *A National Security Strategy for a New Century*, 6.

[37] Ibid., 15.

[38] Ibid., 20.

[39] John M. Shalikashvili, *Shape, Respond, Prepare Now: A National Military Strategy for a New Era*, (Washington, D.C.: Chairman of the Joint Chiefs of Staff, 1997), n.p., on-line, Internet, 15 January 2001, available from http://www.dtic.mil/jcs/core/nms.html.

[40] Terry Hawkins, "The Role and Limits of Science and Technology," presentation to Air War College NBC Seminar, Los Alamos National Laboratory, Los Alamos, NM, 12 September 2000.

[41] James A. Baker, III, *The Politics of Diplomacy*, (New York: G. P. Putnam's Sons, 1995), 359.

[42] Making regime accountability the linchpin of U.S. reprisal policy would imply some modest changes to today's military force structure. According to Bernstein and Dunn, there is a significant challenge for the U.S. in "operationalizing and projecting a credible threat [of regime elimination]." [Bernstein and Dunn, 159.] To meet this

challenge—of making credible the threat of regime elimination—the U.S. should place more emphasis on human intelligence and special operations.

[43] Ibid.

[44] Robert Joseph, n.p.

[45] Richard J. Erickson, *Legitimate Use of Military Force Against State-Sponsored International Terrorism*, (Maxwell AFB, AL: Air University Press, 1989), 180.

[46] Congressional Report Cited in Colonel Randall J. Larsen, and Robert P. Kadlec, *Biological Warfare: A Post Cold War Threat to America's Strategic Mobility Forces*, (Pittsburgh, PA: Matthew B. Ridgway Center for International Security Studies, University of Pittsburgh, 1995), 7.

[47] Richard B. Frank, *Downfall*, (New York: Random House, 1999), 338. Frank discusses the current debate over the number of casualties Truman expected, and the methodology for determining those estimates. Whether he believed 25,000 or 250,000 U.S. servicemen would be killed in an invasion of the Japanese homeland, Truman made the decision. His calculus in World War II is not dissimilar to what may face a future U.S. president if extremely large numbers of Americans are killed by a chemical or biological attack.

[48] Victor A. Utgoff, *Nuclear Weapons and the Deterrence of Biological and Chemical Warfare*, Occasional Paper No. 36, (Washington, D.C.: The Stimson Center, October, 1997), 3, on-line, Internet, 15 January 2001, available from http://www.stimson.org/pubs/zeronuke/utgoff.pdf.

[49] Perry, cited in Scott Sagan, 85.

[50] Erickson, 105.

[51] Bernstein and Dunn, 152.

[52] *United States Special Operations Forces Posture Statement*, U.S. Special Operations Command, 1998, 38.

[53] Dian MacDonald, "Berger: Those Who Attack U.S. 'Cannot Do So With Impunity'," USIS Washington File, 23 August 1998, n.p., on-line, Internet, 15 January 2001, available from http://www.fas.org.man/dod-101/ops/docs/98082303_tpo.html.

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